

### Abstract of the Disclosure

An apparatus for evaluating activity of catalysts, includes a reactive gas-introducing unit, a reacting vessel inlet gas controller for controlling a flow rate of a reactive gas to be fed via the reactive gas-introducing unit, a reacting vessel into which the reactive gas is through the reactive gas-introducing unit, a catalytic reaction gas outlet unit for discharging the catalytic reaction gas from the reacting vessel, a reacting vessel outlet gas controller for controlling a flow rate of a catalytic reaction product discharged from the reacting vessel to the reacted gas outlet unit, and a catalytic reaction product detector for identifying the catalytic reaction product, said reacting vessel comprising a pressure-proof stainless vessel body of which pressure is adjustable and in which a number of catalyst samples are to be placed, and a heater for uniformly heating the catalyst samples, the reactive gas undergoing the catalytic reaction during passing through each catalyst sample, the catalytic reaction gas outlet unit comprising lines for discharging catalytic reaction gases from the catalyst samples, respectively, the reacting vessel outlet gas controller comprising a gas flow rate controller and a switching, said gas flow rate controller being adapted for keeping constant a gas flow rate of the reaction product gas discharged through each catalyst sample through the corresponding line, and the switching section for communicating the corresponding line among a number of the lines with the catalytic reaction product detector.